

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1.-43. (Canceled).

44. (Currently amended): A single-step method for producing antigen-loaded, antigen-presenting cells comprising the steps of:

maturing monocytes ex vivo with a human tumor necrosis factor alpha molecule and a granulocyte-macrophage colony stimulating factor and contacting with-in the presence of an antigenic material that induces an immunogenic response to form mature antigen-presenting cells in a single step.

45. (Previously presented): The method of claim 44, wherein the antigen loaded antigen-presenting cells are produced in less than four days.

46. (Previously presented): The method of claim 44, wherein the antigenic material is selected from the group consisting of antigenic peptides, peptide mimetics, proteins, polyproteins, immune complexes, whole dying cell bodies, dying cell body fragments, viral vectors and liposomes.

47. (Previously presented): The method of claim 44, wherein the antigenic material comprises a heat-treated antigenic material.

48. (Previously presented): The method of claim 44, further comprising separating the antigen-loaded, antigen-presenting cells into fractions containing one or more subsets selected from the group consisting of cells with surface markers (CD1a<sup>+</sup> CD207<sup>+</sup>); cells with surface markers (CD1a<sup>+</sup> CD207<sup>-</sup>); cells with surface markers (CD1a<sup>-</sup>CD14<sup>-</sup>); and cells with surface markers (CD14<sup>+</sup> CD1a<sup>-</sup> CD209<sup>+</sup>) and combinations thereof.

49. (Previously presented): The method of claim 44, wherein the antigen-loaded, antigen-presenting cells are matured in the presence of a T cell that is CD4<sup>+</sup>, CD8<sup>+</sup> or a combination thereof.

50. (Previously presented): The method of claim 44, wherein the antigenic material comprises an insoluble antigenic cell fraction, a partially soluble cell fraction, whole dying cell bodies, dying cell body fragments or combinations thereof.

51.-72. (Cancelled).